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Test Report of Physical Properties of Cement-53 Grade

IS: 12269-2013, IS: 4031(Part-1,2,3,4,5,6,11)-1988	Date:	05-08-2020

Name of Work : Comprehensive Development of Hegdenagar East Side cross roads and Shabarinagar Cross road in Ward No.06

Client	Bruhat Bengalore Mahanagara Palike (BBMP) , Yelahanka Zone, Bengaluru.
Contractor	Sri. V Chandrappa
Customer Reference	EE(PROJECT)/YNK ZONE/WO/163/2019-20
Source of Sample	Sample supplied by Agency
Sample Condition	Satisfactory
Sample Type	Birla Super 53-Grade
Date of Test	05-08-2020
Environmental Condition during test	Temperature: 26°C
	Humidity: 72%

Test Results

Sl. No	Physical Properties	Result	Requirements as per IS: 12269-2013
1	Finess by dry sieving (%)	1.95	-
2	Finess by Air permiability method (m^2/kg, Min)	285.4	225 m2
3	Density, (gm/cm)	3.12	-
4	Standard Consistency (%)	29.50%	Not Specified
5	Initial Setting time	145 Minutes	Not less than 30 minutes
6	Final Setting Time	240 Minutes	Not more than 15 minutes
7	Soudness (Le Chateliers Method)	1.5 mm	Not more than 10 mm

Remarks :

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Test Report of Physical Properties of Cement-53 Grade

IS: 12269-2013, IS: 4031(Part-4,6)-1988	Date:	05-08-2020

Name of Work : Comprehensive Development of Hegdenagar East Side cross roads and Shabarinagar Cross road in Ward No.06

Client	Bruhat Bengalore Mahanagara Palike (BBMP) , Yelahanka Zone, Bengaluru.
Contractor	Sri. V Chandrappa
Customer Reference	EE(PROJECT)/YNK ZONE/WO/163/2019-20
Source of Sample	Sample supplied by Agency
Sample Condition	Satisfactory
Sample Type	Birla Super 53-Grade
Date of Test	05-08-2020
Environmental Condition during test	Temperature: 26°C
	Humidity: 72%

Compressive Strength

Sl. No	Physical Properties	Result	Requirements as per IS: 12269-2013
1	3 Days	28.5 N/mm^2	Not less than 27 N/mm2
2	7 Days	39.0 N/mm^2	Not less than 37 N/mm2
3	28 Days	58.5 N/mm^2	Not less than 53 N/mm2

Remarks :

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Test Report of Fine Aggregate

IS: 383-2016, IS: 2386 (Part-1, 3)-1963 (Reaffirmed-2012) Date: 05-08-2020

Name of Work : Comprehensive Development of Hegdenagar East Side cross roads and Shabarinagar Cross road in Ward No.06

Client	Bruhat Bengalore Mahanagara Palike (BBMP) , Yelahanka Zone, Bengaluru.
Contractor	Sri. V Chandrappa
Customer Reference	EE(PROJECT)/YNK ZONE/WO/163/2019-20
Source of Sample	Sample supplied by Agency
Sample Condition	Satisfactory
Sample Type	Fine Aggregate
Date of Test	05-08-2020

Total wt of the sample (gms):	1000

IS Sieve size (mm)	Weight retained (gm)	Cumulative Weight Retained (gm)	Cumulative % of Retained	Cumulative % of Passing	Specifcations as per IS: 383-2016			
					Grading Zone-1	Grading Zone-2	Grading Zone-3	Grading Zone-4
10	0	0	0.0	100	100	100	100	100
4.75	27	27	2.7	97.3	90-100	90-100	90-100	95-100
2.36	55	82	8.2	91.8	60-95	75-100	85-100	95-100
1.18	239	321	32.1	67.9	30-70	55-90	75-100	90100
600	205	526	52.6	47.4	15-34	35-59	60-79	80-100
300	203	729	72.9	27.1	5-20	8-30	12-40	15-50
150	191	920	92.0	8.0	0-10	0-10	0-10	0-15
PAN	80	1000	100.0	0.0	-	-	-	-

Result: The Tested Sample Conforms to Grading Zone-II

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Test Report of Fine Aggregate

IS: 383-2016, IS: 2386 (Part-1, 3)-1963 (Reaffirmed-2012)	Date:	05-08-2020

Name of Work : Comprehensive Development of Hegdenagar East Side cross roads and Shabarinagar Cross road in Ward No.06

Client	Bruhat Bengalore Mahanagara Palike (BBMP) , Yelahanka Zone, Bengaluru.
Contractor	Sri. V Chandrappa
Customer Reference	EE(PROJECT)/YNK ZONE/WO/163/2019-20
Source of Sample	Sample supplied by Agency
Sample Condition	Satisfactory
Sample Type	Fine Aggregate
Date of Test	05-08-2020

Physical Properties

Sl. No	Physical Properties	Result	Requirements as per IS: 386-2016
1	Water Absorption (%)	1.50	-
2	Specific Gravity	2.59	-
3	Materiai Finer tha 75 micron (%)	6.90	Uncrushed fine Aggregate Max 3% Crushed Fine Aggregate Max 15% Mixed Fine Aggregate Max 12% Manufacture Fine Aggregate Max 10%

Remarks :

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Test Report of Coarse Aggregate

IS: 383-2016, IS: 2386 (Part-1, 3 & 4)-1963 (Reaffirmed-2012)	Date:	05-08-2020

Name of Work : Comprehensive Development of Hegdenagar East Side cross roads and Shabarinagar Cross road in Ward No.06

Client	Bruhat Bengalore Mahanagara Palike (BBMP) , Yelahanka Zone, Bengaluru.
Contractor	Sri. V Chandrappa
Customer Reference	EE(PROJECT)/YNK ZONE/WO/163/2019-20
Source of Sample	Sample supplied by Agency
Sample Condition	Satisfactory
Sample Type	Coarse Aggregate
Date of Test	05-08-2020

Sieve Analysis (Particle Size Distribution) of 20mm Down Coarse Aggregate

Total wt of the sample (gms):			5000		
IS Sieve size (mm)	Weight retained (gm)	Cumulative Weight Retained (gm)	Cumuiative % of Retained	Cumuiative % of Passing	Specifcations as per IS: 383-2016
40	0	0	0.0	100	100
20	245	245	4.9	95.1	90-100
10	2560	2805	56.1	43.9	20-55
4.75	2033	4838	96.8	3.2	0-10
PAN	162	5000	100.0	0.0	-

Remarks :

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Test Report of Fine Aggregate

IS: 383-2016, IS: 2386 (Part-1, 3)-1963 (Reaffirmed-2012)	Date:	05-08-2020

Name of Work : Comprehensive Development of Hegdenagar East Side cross roads and Shabarinagar Cross road in Ward No.06

Client	Bruhat Bengalore Mahanagara Palike (BBMP) , Yelahanka Zone, Bengaluru.
Contractor	Sri. V Chandrappa
Customer Reference	EE(PROJECT)/YNK ZONE/WO/163/2019-20
Source of Sample	Sample supplied by Agency
Sample Condition	Satisfactory
Sample Type	Coarse Aggregate
Date of Test	05-08-2020

Physical Properties

Sl. No	Physical Properties	Result	Requirements as per IS: 386-2016
1	Flakines Index (%)	13.20	Combined Flakiness and Elongation Index ahall nor exceed 40% for uncrushed and crushed aggregate
2	Elongation Index (%)	12.6	
3	Specific Gravity	2.66	-
4	Bulk Density (Loose) (Kg/l)	1.54	-
5	Bulk Density (Composed) (Kg/l)	1.58	-
6	Water Absorption (%)	0.22	-
7	Aggregate Crushing Value (%)	24.50	Max 30% for Aggregates to be used in concrete for wearing surfaces, In case aggregate Crushing Value exceeds 30% then the test for 10% fines should be conducted for aggregate to be used in concrete oter tha for wearing surfaces
8	Aggregate Impact Value (%)	22.80	Max 30% for aggregate to be used in concrete for wearing surfaces, 45% for aggregate to be used in concrete other than for wearing surface.

Remarks :

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Test Report of Coarse Aggregate

IS: 383-2016, IS: 2386 (Part-1, 3 & 4)-1963 (Reaffirmed-2012)	Date:	05-08-2020

Name of Work : Comprehensive Development of Hegdenagar East Side cross roads and Shabarinagar Cross road in Ward No.06

Client	Bruhat Bengalore Mahanagara Palike (BBMP) , Yelahanka Zone, Bengaluru.
Contractor	Sri. V Chandrappa
Customer Reference	EE(PROJECT)/YNK ZONE/WO/163/2019-20
Source of Sample	Sample supplied by Agency
Sample Condition	Satisfactory
Sample Type	Coarse Aggregate
Date of Test	05-08-2020

Sieve Analysis (Particle Size Distribution) of 40mm Down Coarse Aggregate

Total wt of the sample (gms):			15000		
IS Sieve size (mm)	Weight retained (gm)	Cumulative Weight Retained (gm)	Cumulative % of Retained	Cumulative % of Passing	Specifcations as per IS: 383-2016
80	0	0	0	100	100
40	244	244	1.6	98.4	90-100
20	5432	5676	37.8	62.2	30-70
10	4332	10008	66.7	33.3	10-35
4.75	4654	14662	97.7	2.3	0-5
PAN	338	15000	100.0	0.0	-

Remarks :

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Test Report of Fine Aggregate

IS: 383-2016, IS: 2386 (Part-1, 3)-1963 (Reaffirmed-2012)	Date:	05-08-2020

Name of Work : Comprehensive Development of Hegdenagar East Side cross roads and Shabarinagar Cross road in Ward No.06

Client	Bruhat Bengalore Mahanagara Palike (BBMP) , Yelahanka Zone, Bengaluru.
Contractor	Sri. V Chandrappa
Customer Reference	EE(PROJECT)/YNK ZONE/WO/163/2019-20
Source of Sample	Sample supplied by Agency
Sample Condition	Satisfactory
Sample Type	Coarse Aggregate
Date of Test	05-08-2020

Physical Properties

Sl. No	Physical Properties	Result	Requirements as per IS: 386-2016
1	Flakines Index (%)	12.40	Combined Flakiness and Elongation Index ahall nor exceed 40% for uncrushed and crushed aggregate
2	Elongation Index (%)	11.8	
3	Specific Gravity	2.68	-
4	Bulk Density (Loose) (Kg/l)	1.48	-
5	Bulk Density (Composed) (Kg/l)	1.52	-
6	Water Absorption (%)	0.22	-

Remarks :

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Test Result of Grain Size Analysis

(IS : 2720 Part -4) | Date: 06-04-2020

Name Of Work: Comprehensive Development of Hegdenagar East Side cross roads and Shabarinagar cross road in Ward No.06

Client	Bruhat Bengalore Mahanagara Palike (BBMP) , Yelahanka Zone, Bengaluru.
Contractor	Sri. V Chandrappa
Customer Refe	EE(PROJECT)/YNK ZONE/WO/163/2019-20
Source of Sam	Sample supplied by Agency
Sample Type	Soil-Grain Size Analysis
Date of Test	06-04-2020

Weight before wash (gm) : 1000 Weight after wash (gm) :

IS Sieve Size (mm)	Weight Retained (gm)	Cumulative Weight Retained (gm)	Cumulative (%) of Retained (gm)	Cumulative (%) of Passing (gm)	Remarks
75 mm	0	0	0	100	
20 mm	0	0	0	100	
4.75 mm	6.7	6.7	0.67	99.33	
2 mm	119.54	126.24	12.62	87.38	
425 m	204.5	330.74	33.07	66.93	
75 m	185.54	516.28	51.63	48.37	
Pan					
TOTAL					

OBSERVATION SHEET

DESCRIPTION PARTICAL		SIEVE SIZE	PERCENTAGE	Total %
Gravel	Coarse	75 mm - 20 mm	0.00	0.67
	Fine	20 mm - 4.75 mm	0.67	
Sand	Coarse	4.75 mm - 2 mm	11.95	50.96
	Medium	2 mm - 0.425 mm	13.23	
	Fine	0.425 mm - 0.075 mm	28.25	
Silt & Clay		0.075 mm Passing	48.37	48.37

Remarks :

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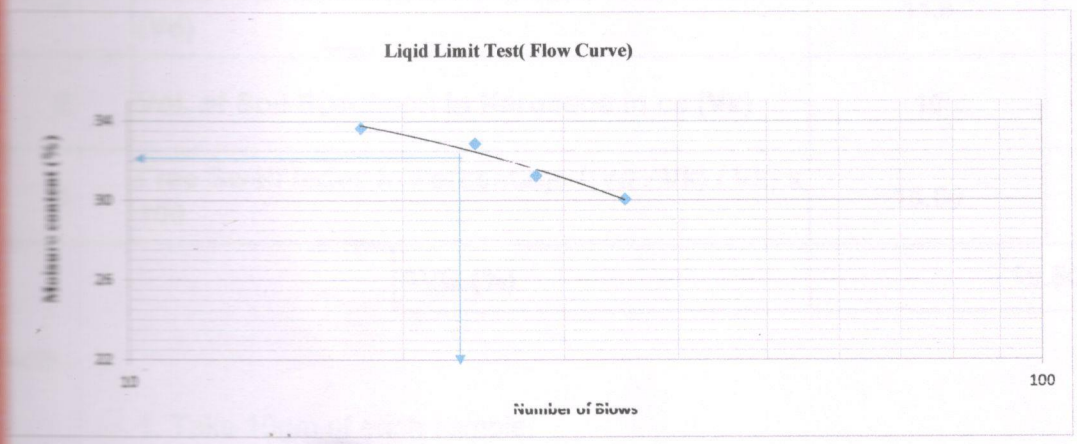
Test Result of Atterberg Limits

(IS : 2720, Part - 5) | Date: 06-04-2020

Name Of Work: Comprehensive Development of Hegdenagar East Side cross roads and Shabarinagar cross road in Ward No.06

Client	Bruhat Bengalore Mahanagara Palike (BBMP) , Yelahanka Zone, Bengaluru.					
Contractor	Sri. V Chandrappa					
Customer Reference	EE(PROJECT)/YNK ZONE/WO/163/2019-20					
Source of Sample	Sample supplied by Agency					
Sampie Type	Soii-Atterberg Limits					
Date of Test	06-04-2020					
Determination No.	Liquid Limit				Plastic Limit	
	1	2	3	4	1	2
No Of Blows	18	24	28	35		
Container No.	S119	S120	S121	S122	S123	S124
Mass of Container (gm)	30.07	32.39	31.73	31.57	30.58	31.79
Mass of Wet Soil + Container (gm)	56.87	57.04	55.17	56.96	43.94	41.14
Mass of oven Dry Soil + Container (gm)	50.12	50.94	49.59	51.09	42.34	40.09
Mass of Water=(4-5) (gm)	6.75	6.10	5.58	5.87	1.60	1.05
Mass of oven dry soil =(5-3) (gm)	20.05	18.55	17.86	19.52	11.76	8.30
Water Content (w=6/7*100) (%)	33.67	32.88	31.24	30.07	13.61	12.65



Liquid Limit : Moisture Content at 25 Blows

Liquid Limit	32.24	%
Plastic Limit	13.13	%
Plasticity Index	19.11	%

Remarks :

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Test Result of Free Swell index

(IS : 2720 , Part-40)	Date: 06-04-2020

Name Of Work: Comprehensive Development of Hegdenagar East Side cross roads and Shabarinagar cross road in Ward No.06

Client	Bruhat Bengalore Mahanagara Palike (BBMP) , Yelahanka Zone, Bengaluru.
Contractor	Sri. V Chandrappa
Customer Reference	EE(PROJECT)/YNK ZONE/WO/163/2019-20
Source of Sample	Sample supplied by Agency
Sample Type	Soil-Free Swell Index
Date of Test	06-04-2020

S.No.	Description of Test	Readings	
1	Vol. of Soil Specimen in Distilled Water in cc (Vd)	11.8	12.1
2	Vol. of Soil Specimen in Kerosene in cc (Vk)	10	10
3	Free Swell Index in Percentage ((Vd - Vk) / Vk) x 100	18.00	21.00
	AVG (%)	19.50	

Note :

1. Take 10gm of each sample.

Remarks :

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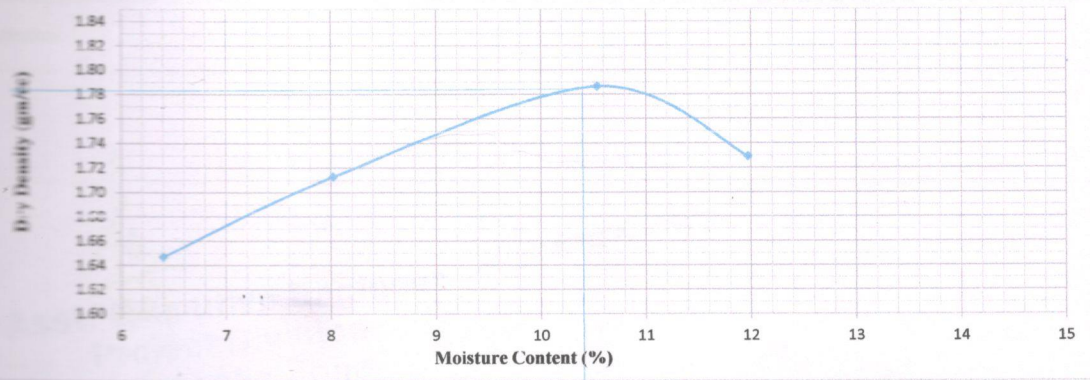
Test Result of Moisture - Density Relationship

(IS : 2720 , Part-08) | Date: 06-04-2020

Name Of Work: Comprehensive Development of Hegdenagar East Side cross roads and Shabarinagar cross road in Ward No.06

Client	Bruhat Bengalore Mahanagara Palike (BBMP) , Yelahanka Zone, Bengaluru.				
Contractor	Sri. V Chandrappa				
Customer Reference	EE(PROJECT)/YNK ZONE/WO/163/2019-20				
Source of Sample	Sample supplied by Agency				
Sample Type	Soil-Moisture - Density Relationship				
Date of Test	06-04-2020				
Region no :	Wt. Sample Taken : 5 Kg				
Determination No	1	2	3	4	
Percentage of Water taken(%)	6	8	10	12	
Mould No.	3	3	3	3	
Volume of mould (V) CC	2250.63	2250.63	2250.63	2250.63	
Mass of mould (M1) gm	5740	5740	5740	5740	
Mass of mould+Compacted soil (M2) gm	9684	9904	10184	10098	
Mass of Compacted soil(M3=M2-M1) gm	3944	4164	4444	4358	
Wet Density of soil (γ_w)=M3/V gm/cc	1.752	1.850	1.975	1.936	
Container No.	S125	S126	S127	S128	
Mass of Container (gm)	32.72	30.89	32.23	30.30	
Mass of Wet Soil+Container (gm)	105.23	109.55	111.24	120.21	
Mass of Oven Dry Soil + Container (gm)	100.87	103.71	103.71	110.6	
Mass of Water (gm)	4.36	5.84	7.53	9.61	
Weight of dry soil (gm)	68.15	72.82	71.48	80.30	
Water Content (%)	6.40	8.02	10.53	11.97	
Dry Density of Soil (γ_d)=γ_w/(1+w%) gm/cc	1.647	1.713	1.786	1.729	



Remarks :

From Graph		
Maximum Dry Density (MDD)	1.785	gm/cc
Optimum Moisture Content (OMC)	10.40	%

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Test Result of Field Density Test

IS:2720 (Part-28) | Date: 06-04-2020

Name Of Work: Comprehensive Development of Hegdenagar East Side cross roads and Shabarinagar cross road in Ward No.06

Client		Bruhat Bengalore Mahanagara Palike (BBMP) , Yelahanka Zone, Bengaluru.					
Contractor		Sri. V Chandrappa					
Customer Reference		EE(PROJECT)/YNK ZONE/WO/163/2019-20					
Source of Sample		Sample supplied by Agency					
Sample Type		Soil Field Density Test (FDD)					
Date of Test		06-04-2020					
MDD (gm/cc)		1.785					
OMC (%)		10.4					
Field Density		Test 1	Test 2	Test 3	Test 4	Test 5	Test 6
Weight of soil from hole (Ww)	gm	11201	11326	11881	11686	11771	11621
Weight of Sand + Cylinder (W1)	gm	30000	30000	30000	30000	30000	30000
Weight of Sand + Cylinder after pouring (W2)	gm	19499	19414	19109	19149	19174	19284
Weight of Sand in Cone (W3)	gm	2257	2257	2257	2257	2257	2257
Weight of Sand in hole (W_b) = W1-W2-W3)	gm	8244	8329	8634	8594	8569	8459
Unit Weight of Sand (Gs)	gm/cc	1.321	1.321	1.321	1.321	1.321	1.321
Volume of the hole (v)=Wb/Gs	cc	6240.73	6305.07	6535.96	6505.68	6486.75	6403.48
Bulk Density of Soil $\gamma = Ww / v$	gm/cc	1.79	1.80	1.82	1.80	1.81	1.81
Moisture content by RMM	%	10.5	9.66	10.4	9.66	10.7	10.4
Dry density of soil $\gamma_d = \{g /(1 + w / 100)\}$	gm/cc	1.62	1.64	1.65	1.64	1.64	1.64
Relative Compaction	%	0.9100	0.9177	0.9224	0.9177	0.9183	0.9209
% of Compaction required	%	0.916					
Remarks:							

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Test Result of Field Density Test

IS:2720 (Part-28) | Date: 06-04-2020

Name Of Work: Comprehensive Development of Hegdenagar East Side cross roads and Shabarinagar cross road in Ward No.06

Client		Bruhat Bengalore Mahanagara Palike (BBMP) , Yelahanka Zone, Bengaluru.					
Contractor		Sri. V Chandrappa					
Customer Reference		EE(PROJECT)/YNK ZONE/WO/163/2019-20					
Source of Sample		Sample supplied by Agency					
Sample Type		Soil Field Density Test (FDD)					
Date of Test		06-04-2020					
MDD (gm/cc)		1.785					
OMC (%)		10.4					
Field Density		Test 1	Test 2	Test 3	Test 4	Test 5	Test 6
Weight of soil from hole (Ww)	gm	11156	11281	11636	11641	11726	11576
Weight of Sand + Cylinder (W1)	gm	30000	30000	30000	30000	30000	30000
Weight of Sand + Cylinder after pouring (W2)	gm	19452	19367	19062	19102	19127	19237
Weight of Sand in Cone (W3)	gm	2257	2257	2257	2257	2257	2257
Weight of Sand in hole (W_b = W1-W2-W3)	gm	8291	8376	8681	8641	8616	8506
Unit Weight of Sand (Gs)	gm/cc	1.321	1.321	1.321	1.321	1.321	1.321
Volume of the hole (v)=Wb/Gs	cc	6276.31	6340.65	6571.54	6541.26	6522.33	6439.06
Bulk Density of Soil γ = Ww / v	gm/cc	1.78	1.78	1.80	1.78	1.80	1.80
Moisture content by RMM	%	10.2	9.8	10.6	10.2	10.5	10.8
Dry density of soil γ_d = {g /(1 + w / 100)}	gm/cc	1.61	1.62	1.63	1.61	1.63	1.62
Relative Compaction	%	0.9036	0.9078	0.9123	0.9047	0.9115	0.9090
% of Compaction required	%	0.908					
Remarks:							

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Test Result of Field Density Test

IS:2720 (Part-28) | Date: 06-04-2020

Name Of Work: Comprehensive Development of Hegdenagar East Side cross roads and Shabarinagar cross road in Ward No.06

Client		Bruhat Bengalore Mahanagara Palike (BBMP) , Yelahanka Zone, Bengaluru.					
Contractor		Sri. V Chandrappa					
Customer Reference		EE(PROJECT)/YNK ZONE/WO/163/2019-20					
Source of Sample		Sample supplied by Agency					
Sample Type		Soil Field Density Test (FDD)					
Date of Test		06-04-2020					
MDD (gm/cc)		1.785					
OMC (%)		10.4					
Field Density		Test 1	Test 2	Test 3	Test 4	Test 5	Test 6
Weight of soil from hole (Ww)	gm	11211	11336	11891	11696	11781	11631
Weight of Sand + Cylinder (W1)	gm	30000	30000	30000	30000	30000	30000
Weight of Sand + Cylinder after pouring (W2)	gm	19521	19436	19131	19171	19196	19306
Weight of Sand in Cone (W3)	gm	2257	2257	2257	2257	2257	2257
Weight of Sand in hole (W_b = W1-W2-W3)	gm	8222	8307	8612	8572	8547	8437
Unit Weight of Sand (Gs)	gm/cc	1.321	1.321	1.321	1.321	1.321	1.321
Volume of the hole (v)=Wb/Gs	cc	6224.07	6288.42	6519.30	6489.02	6470.10	6386.83
Bulk Density of Soil $\gamma = Ww / v$	gm/cc	1.80	1.80	1.82	1.80	1.82	1.82
Moisture content by RMM	%	10.5	9.66	10.4	10	10.73	10.7
Dry density of soil $\gamma_d = \{g /(1 + w / 100$	gm/cc	1.63	1.64	1.65	1.64	1.64	1.65
Relative Compaction	%	0.9132	0.9209	0.9256	0.9180	0.9212	0.9216
% of Compaction required	%	0.920					

Remarks:

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Project Division
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EE (Project) Ynk Zone/WO/163/2019-20

Date: 31-10-2020

1. TEST REPORT ON REINFORCEMENT STEEL:

Sub: Testing of Reinforcement Steel of diameter 10 & 8 mm (Culvert 10&16mm) TMT Steel.

(Project*: Comprehensive Development of Hegdenagar East Side cross roads and Shubarinagar cross road in Ward No.06

Report Required for: Assistant Executive Engineer,
Yelahanka Project Division,
BBMP, Bangalore.

Name of the Agency/Contractor*: Sri. V Chandrappa No.681, Dasarahalli, Hebbal Post, Bangalore-24.

TABLE – 1

SL No	Details	For 8 mm		For 10 mm	
		Test Results	Min Req. as per IS 1786-2008	**Test Results**	Min Req. as per IS 1786-2008
01	Observed diameter of bar	**8.0 mm**	8.0 mm	**10.0 mm**	10.0 mm
02	Observed Wt/m Length **Kg/m**	**0.393**	0.363	**0.621**	0.567
03	Proof stress/Yield stress, fy , **N/mm²**	**560.0**	500.0	**556.0**	500.0
04	Bend/ Re bend Test	**Ok**	---	**Ok**	---
05	Percentage of Elongation, %	**19.50**	16.00	**20.80**	16.00
06	Ultimate Tensile Strength **N/mm²**	**649.0**	565.0	**645.0**	565.0

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04	Bend/ Re bend Test	**Ok**	---	**Ok**	---
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TABLE – 2

SL No	Details	For 10 mm		For 16 mm	
		Test Results	Min Req. as per IS 1786-2008	**Test Results**	Min Req. as per IS 1786-2008
01	Observed diameter of bar	**10.0 mm**	10.0 mm	**10.0 mm**	10.0 mm
02	Observed Wt/m Length **Kg/m**	**0.621**	0.567	**1.57**	0.567
03	Proof stress/Yield stress, fy , **N/mm²**	**556.0**	500.0	**556.0**	500.0
04	Bend/ Re bend Test	**Ok**	---	**Ok**	---

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Test Report of Cement Concrete Cubes

IS: 516-1959 (Method of tests for strength of Concrete C1.5) | Date: 27-08-2020

Name of Work : Comprehensive Development of Hegdenagar East Side cross roads and Shabarinagar Cross road in Ward No.06

Client	Bruhat Bengalore Mahanagara Palike (BBMP) , Yelahanka Zone, Bengaluru.
Contractor	Sri. V Chandrappa
Customer Reference	EE(Project)YNK Zone/WO/163/2019-20
Source of Sample	Sample supplied by Agency
Sample Condition	Satisfactory
Date of Reciept	20-08-2020
Sample Type	C.C Drain Raft Concrete
Sample Type/Size	150x150x150 mm
Sample Grade/ Age	M20/ 7 Days Compressive Strength
Date of Test	27-08-2020
Location	

Sl No.	Identification Mark	Grade of Concrete	Date of Casting	Date of Trsting	Dimension of Specification	Cross sectional area	Maximum Load in	Compressive Strength	Average Compressive Strength
					mm	Sq.mm	KN	N/mm^2	N/mm^2
1	C.C Drain Raft Concrete	M20	20-08-2020	17-09-2020	150x150x150	22500	456	15.23	15.51
2	C.C Drain Raft Concrete	M20	20-08-2020	17-09-2021	150x150x150	22500	466	15.62	
3	C.C Drain Raft Concrete	M20	20-08-2020	17-09-2022	150x150x150	22500	463	15.68	

Remarks :

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Sample Condition	Satisfactory
Date of Reciept	20-08-2020
Sample Type	C.C Drain Raft Concrete
Sample Type/Size	150x150x150 mm
Sample Grade/ Age	M20/ 7 Days Compressive Strength
Date of Test	27-08-2020
Location	

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